

**AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

**LISTING OF CLAIMS:**

1. (Canceled)
2. (Currently amended) ~~The method of claim 1 further comprising the step of:~~In a computer system, a method comprising the steps of:  
providing a PSDL parser capable of automatically, without user intervention,  
extracting print job requirements from a PSDL file;  
automatically, without user intervention, creating a proposed workflow for a printshop using said print job requirements extracted by said PSDL parser and resource knowledge recording resources in said printshop; and  
executing said print job in said printshop using said proposed workflow, wherein said workflow is designed to operate within an environment having a set of autonomous cells and incorporates:
  - mapping said print jobs to one or more of said autonomous cells;
  - dividing said print jobs into sub-jobs within autonomous cells; and
  - invoking one of a pull-type, push-type or combination push/pull-type control policy to keep jobs flowing through the print shop even as random disruptive events occur.
3. (Canceled)
4. (Currently amended) ~~The method of claim 1~~In a computer system, a method comprising the steps of:  
providing a PSDL parser capable of automatically, without user intervention,  
extracting print job requirements from a PSDL file;  
automatically, without user intervention, creating a proposed workflow for a printshop using said print job requirements extracted by said PSDL parser and resource

knowledge recording resources in said printshop, wherein said resource knowledge includes information regarding job costs and availability in said printshop of available machines, machine operators, work-in-progress and inter-process storage buffer levels and materials required to process said print job.

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Previously presented) In a computer system, a method comprising the steps of:  
submitting a print job to a printshop having resources, said print job stored in a printshop job description language (PSDL) file  
automatically, without user intervention, extracting print job requirements from said PSDL file;  
comparing said print job requirements, including material and labor requirements, from said PSDL file against available resources, status of the work-in-progress, current schedule and available materials in the printshop; and

automatically, without user intervention, creating a proposed workflow for said printshop from said print job requirements and from printshop resource knowledge resources, said proposed workflow dividing said print job into components and mapping said components of said print job to available resources of said printshop so as to set buffer space between machines to optimal levels while processing said print job.

15. (Original) The method of claim 14 further comprising the step of:

executing said print job in said printshop using said proposed workflow.

16. (Previously presented) The method of claim 14 wherein said resource knowledge includes information regarding job costs and availability in said printshop of machines, machine operators and materials used in processing said print job.

17. (Original) The method of claim 14 wherein said resource knowledge further includes information regarding operational speed and capacity of machines in said printshop used in processing said print job.

18. (Previously presented) In a computer system containing a network interface, said system connected to a network via said network interface, a method comprising the steps of:

providing a print job submitted by a job submitter and stored in a print job description language (PSDL) file located on a remotely located computer system that is connected to the network;

sending said print job stored in said PSDL file from said remotely located computer system to a printshop via the network and said network interface;

automatically, without user intervention, extracting print job requirements from said PSDL file;

comparing said print job requirements against available resources in the printshop; and

automatically, without user intervention, creating a proposed workflow for said printshop using a PSDL parser and resource knowledge regarding resources in the

printshop, wherein said available resources are arranged into autonomous cells and said workflow maps the print job to one or more of said autonomous cells.

19. (Previously presented) The method of claim 18 further comprising the step of:  
executing said print job in said printshop using said proposed workflow, wherein said workflow is designed to operate within an environment having a set of autonomous cells and incorporates:

mapping said print jobs to one or more of said autonomous cells;  
dividing said print jobs into sub-jobs within autonomous cells; and  
invoking one of a pull-type, push-type or combination push/pull-type control policy to keep jobs flowing through the print shop even as random disruptive events occur.

20. (Original) The method of claim 18 wherein said network is the Internet.

21. (Previously presented) The method of claim 18 wherein said resource knowledge includes information regarding job costs and availability in said printshop of machines, machine operators and materials used in processing said print job.

22. (Original) The method of claim 18 wherein said proposed workflow is used to generate a job cost estimate.

23. (Original) The method of claim 18 wherein said job cost estimate includes material costs and labor costs.

24. (Original) The method of claim 23 wherein said proposed workflow and said job cost estimate are transmitted to said job submitter via the Internet for approval prior to said print job being processed.

25. (Original) The method of claim 24, further comprising the steps of:  
generating a new proposed workflow and job cost estimate in response to said job submitter rejecting said proposed workflow and said job cost estimate.

26. (Canceled)

27. (Previously amended) A medium for use with a computer system, said medium holding computer-executable instructions for a method, said method comprising the steps of;

submitting a print job to a printshop having resources, said print job stored in a printshop job description language (PSDL) file;

automatically, without user intervention, extracting print job requirements from said PSDL file;

automatically, without user intervention, comparing said print job requirements against available resources, work-in-progress, current schedule and available materials in the printshop; and

automatically, without user intervention, creating a proposed workflow for said printshop, said proposed workflow dividing said print job into components and mapping said components of said print job to available resources of said printshop so as to set buffer space between machines to optimal levels while processing said print job.